

PO-12-005173

Single Order

Work Order ID 93151

November 15, 2012 7:37:07 AM

\*93151\* PRELIMINARY ISSUE

Page 1

Item ID: D4528-3

Accept

\*N9000040100\*

Setup Start

\*NS1\*

Revision ID: PRELIM

Stop

\*NS2\*

Item Name: Frame

Start Date: 11/15/12

Start Qty: 2.00

\*2\*

Cust Item ID:

Required Date: 11/21/12

Req'd Qty: 2.00

\*2\*

Customer:

Reference:

Approvals:

Process Plan:

CL

Date:

11/15

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

\*NR1\*

Stop

\*NR2\*

Sequence  
Work Center ID

Operation  
Description

Set Up  
Run Hours

Tool ID

Plant

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4528

pa 7 87 4c

100

0.00

\*100\*

FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D4028

Dwg Rev: PM

6661.040

Prog Rev: PM

2-Deburr as required

110

QC2- Inspect parts off machine FAI/FAIB

0.00

\*110\*

QC

Memo

0.00

Quality Control

②

REL-11-02

②

REL-11-02

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
<b>FAULT CATEGORY</b>											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other		

# Work Order ID 93151

\*93151\*

Page 2

November 15, 2012 7:37:07 AM

Item ID: D4528-3 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: PRELIM Stop \*NS2\*  
 Item Name: Frame  
 Start Date: 11/15/12 Start Qty: 2.00 \*2\* Cust Item ID:  
 Required Date: 11/21/12 Req'd Qty: 2.00 \*2\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC8- Inspect parts - second check  Memo	0.00 0.00				2			
130 *130* Small Fab Small Fab	Small Fab  Memo COUNTERSINK HOLES AS PER DWG	0.00 0.00				2			FF 12-11-26
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00				2			

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
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Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

## November 15, 2012 7:37:07 AM

Page 3

## Packaging

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	<b>Date</b>	<b>Step</b>	<b>Qty</b>	<b>Description of work order update or Non-conformance</b>	<b>Initial Chief Eng</b>	<b>Action Description</b>	<b>Sign &amp; Date</b>	<b>Verification</b>	<b>QC Inspector</b>		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY									
<b>Landing Gear</b>		<b>General</b>		<b>Grain</b>		<b>Maintenance</b>		<b>Other</b>	
<input type="checkbox"/> Bending	<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> Bend	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Hardware	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Pressure/Forced	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Cracks	<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Weld	<input type="checkbox"/> Wrong Stock Pulled
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Contamination	<input type="checkbox"/> Countersink	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Other
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Misread	<input type="checkbox"/> Offset				
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Drawing	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration	<input type="checkbox"/> Out of Sequence				
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions							

# Work Order ID 93151

\*93151\*

Page 4

November 15, 2012 7:37:07 AM

Item ID: D4528-3 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: PRELIM Stop \*NS2\*  
 Item Name: Frame  
 Start Date: 11/15/12 Start Qty: 2.00 \*2\* Cust Item ID:  
 Required Date: 11/21/12 Req'd Qty: 2.00 \*2\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC21- Final Inspection - Work Order Release	0.00							
*180*									
QC	Memo	0.00							
Quality Control									

MF  
12-11-26

73594

POSITIVE RECALL  
 EFFECTIVE 12/1/15 AUTH W  
 RELEASED \_\_\_\_\_ DATE \_\_\_\_\_

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY				
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other



# Picklist Print

November 15, 2012 7:37:07 AM

Page 1

Work Order ID: 93151

Parent Item: D4528-3

Parent Item Name: Frame

Start Date: 11/15/12

Required Date: 11/21/12

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A NEW ISSUE 12-06-21 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.040 6061-T6 .040 Sheet		Purchased	No			100	sf	156.6578	1.74	3.6631579			
<hr/>													
						<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>			
						MAT021		156.6578					
						121099		156.6578					
											<hr/>		
											12-11-22		
											121099		

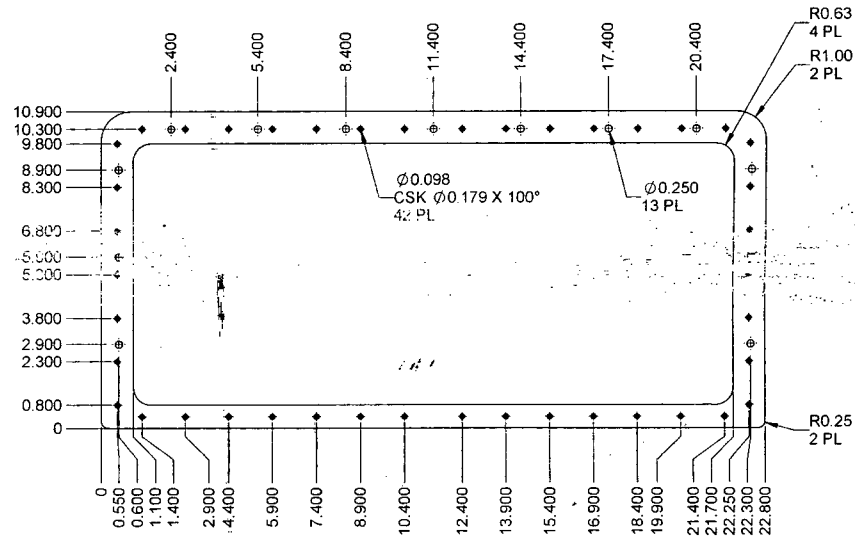
NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
<b>FAULT CATEGORY</b>											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other



**D4528-3 FRAME**

**PRELIMINARY ISSUE**  
 11.11.25

- NOTES:**
- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.040 THICK  
 PER QQ-A-250/11 OR AMS-QQ-A-250/11  
 OR AMS 4025 OR AMS 4027 OR ASTM B209  
 REF DART SPEC M6061T6S.040
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: N/A
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.24 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. <b>D4528</b>	REV. PA7
MFG. APPR.		SHEET 3 OF 4	
APPROVED		TITLE	SCALE
DE APPR.		<b>SCREEN</b>	NTS
DATE	<b>11.11.25</b>	<small>COPYRIGHT © 2011 BY DART AEROSPACE LTD          THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS          NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT          WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	<b>Date</b>	<b>Step</b>	<b>Qty</b>	<b>Description of work order update or Non-conformance</b>	<b>Initial Chief Eng</b>	<b>Action Description</b>	<b>Sign &amp; Date</b>	<b>Verification</b>	<b>QC Inspector</b>		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY				
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 93151
<b>Description:</b> FRAME		<b>Part Number:</b> D45283
<b>Inspection Dwg:</b> D45283 <b>Rev:</b> PA7		<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø .098	+ .004 - .001	.098	2		V 1B02	
Ø .250	+ .005 - .001	.252	2		V	
.550	+L .010	.556	2		V	
.600	+L .010	.603	2		V	
1.100	+L .010	1.103	2		V	
1.400	+L .010	1.404	2		V	
2.900	+L .010	2.907	2		V	
4.400	+L .010	4.405	2		V	
5.900	+L .010	5.907	2		V	
7.400	+L .010	7.406	2		V	
8.900	+L .010	8.906	2		Prowler	
10.400	+L .010	10.409	2		P	
12.400	+L .010	12.400	2		T 1B01	
13.900	+L .010	13.900	2		T	
15.400	+L .010	15.400	2		T	
16.900	+L .010	16.900	2		T	
18.400	+L .010	18.400	2		T	
19.900	+L .010	19.900	2		T	
21.400	+L .010	21.400	2		T	
21.700	+L .010	21.700	2		T	
22.250	+L .010	22.250	2		T	
22.300	+L .010	22.300	2		T	
22.800	+L .010	22.800	2		T	

<b>Measured by:</b> RB
<b>Date:</b> 12-11-22

<b>Audited by:</b> DAS 15
<b>Date:</b> 12/11/22

<b>Preliminary Approval:</b>
<b>Date:</b>

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 93151
<b>Description:</b> FRAME		<b>Part Number:</b> D4528-3
<b>Inspection Dwg:</b> D4528-3 <b>Rev:</b> PA7		<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.800	$\pm .010$	1.807	2		V RB02	
2.300	$\pm .010$	2.304	2		V	
2.900	$\pm .010$	2.901	2		V	
3.800	$\pm .010$	3.810	2		V	
5.300	$\pm .010$	5.306	2		V	
5.900	$\pm .010$	5.907	2		V	
6.800	$\pm .010$	6.808	2		V	
8.300	$\pm .010$	8.305	2		PROW02	
8.900	$\pm .010$	8.901	2		P	
9.800	$\pm .010$	9.803	2		P	
10.300	$\pm .010$	10.309	2		P	
10.900	$\pm .010$	10.905	2		V	
2.400	$\pm .010$	2.403	2		V	
5.400	$\pm .010$	5.403	2		V	
8.400	$\pm .010$	8.401	2		P	
11.400	$\pm .010$	11.399	2		P	
14.400	$\pm .010$	14.400	2		T RB01	
17.400	$\pm .010$	17.400	2		T	
20.400	$\pm .010$	20.400	2		T	
10.40	$\pm .010$	10.40	2		V	

<b>Measured by:</b> RB	<b>Audited by:</b>	<b>Preliminary Approval:</b>
<b>Date:</b> 12-11-02	<b>Date:</b>	<b>Date:</b>

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>		<b>AGAINST DEPARTMENT/PROCESS</b>							
	Rework	<input type="checkbox"/>	Skid-tube	<input type="checkbox"/>	Crosstube	<input type="checkbox"/>	Water Jet	<input type="checkbox"/>	Engineering	<input type="checkbox"/>
	Scrap	<input type="checkbox"/>	Machining	<input type="checkbox"/>	Small Fab	<input type="checkbox"/>	Prod. Eng. Coord.	<input type="checkbox"/>	Quality	<input type="checkbox"/>
	Use-as-is	<input type="checkbox"/>	Thermoforming	<input type="checkbox"/>	Finishing	<input type="checkbox"/>	Rec/Store/Packaging	<input type="checkbox"/>	Other	<input type="checkbox"/>
	Work Order Update	<input type="checkbox"/>	Large Fab	<input type="checkbox"/>	Composite	<input type="checkbox"/>	Supplier	<input type="checkbox"/>		

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General		
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset	<input type="checkbox"/> Pressure/Forced
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Weld
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Wrong Stock Pulled
			<input type="checkbox"/> Other

# Receiving Report

Date: 12/3/19

Batch No: 1121099

Supplier: THY 5620-11

Dart P/O: 16407

Packing Slip: Yes ☒ No ☐  
 Invoice: Yes ☐ No ☒  
 Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐  
 Waybill Attached: Yes ☐ No ☒ N/A ☐  
 Shipment Complete: Yes ☒ No ☐ N/A ☐  
 QC6 Inspection 12/03/19 N/A ☒  
 Work Order                     

## Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12                     

Production/Admin: 12/3/19  
 Date                       
 Received/Costing                       
 Initial                     

Location



Monday, March 19, 2012 7:11:48 AM

All Vendors PO ID PO16401 Receipt Dates from 3/19/2012 to 3/19/2012 All Line Item Types  
All Item ID/GL/WOs All Rec. Employees All Currencies  
Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
Vendor ID/Vendor Name		VC-COP001	Thyssenkrupp Materials CA Ltd								
PO16401	7		M6061T6S.040	sf	3/16/2012	3/19/2012	288.0000	\$1.68	0.0000	0	\$485.19
CAD	No		6061-T6 .040 Sheet	sf	288.0000	DESJ02		\$485.19	0.0000	0	
			121099								
	8		M6061T6S.032	sf	3/16/2012	3/19/2012	192.0000	\$2.36	0.0000	0	\$452.82
	No		6061-T6 Sheet 0.032"	sf	192.0000	DESJ02		\$452.82	0.0000	0	
			121099								
Total Received Quantity:											480.0000
Total Qty to Inspect (PO U/M):											0.0000
Total Reject Quantity:											0.0000
Total Receipt Value:											\$938.01
Total Balance Due Quantity:											0.0000

Ship From: THYSSENKRUPP MATERIALS NA  
2821 LANGSTAFF ROAD  
CONCORD, ONTARIO L4K 5C6  
Tel: 905 669 9444 Fax: 9057389033

Ship To: ( 1 )  
DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7  
Tel: 613-632-9577 Fax: 613-632-1053

B I L L O F L A D I N G

No: PEC 758116  
Ship Date 16Mar12 at 15:23 From PFW  
Probill  
Via VIM TRANSFER  
FOB CONCORD  
Frt PREPAID  
Route 0- 0 Manifest  
Vhcle Trailer  
Slp STAN IVERS (905-532-1350)  
Sold To: ( 20115 )  
DART AEROSPACE  
1270 ABERDEEN ST  
HAWKESBURY, ON K6A 1K7

B I L L O F L A D I N G

1) Our Order PEC-428541- 1 Your PO # 16401  
ALUMINUM SHEET 6061 T6

.0400 Nom X 48.0000" X 144.0000"

Heat Number Tag No  
7051601 47835

Quantity PCS MTR Wt LBS  
288.00 SFT 6 163

2) Our Order PEC-428541- 2 Your PO # 16401  
ALUMINUM SHEET 6061 T6

.0320 Nom X 48.0000" X 144.0000"

Heat Number Tag No  
7174701 47836

Quantity PCS MTR Wt LBS  
192.00 SFT 4 87

TOTAL: Tags PCS LBS  
2 10 250

ADD ON TO 428539 SUR-CHARGE PAID\*\*\*SHIP TOGETHER

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT  
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR  
TO SHIPPING.

ATTN: CHANTAL/LINDA

\*\* ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER \*\*  
\*\* REFERENCED ON IT \*\*

TOTAL 1 SKID GW. 288 LBS

\*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA  
CONCORD, ONT.\* \*\*\* 9:00 AM TO 4:00 PM \*\*\*

Page: 1 ....Continued

1 crate

6/13/19

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
RAPPORTÉES IMMÉDIATEMENT  
ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY  
RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT  
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER

# B I L L O F L A D I N G

No: PEC 758116

Ship From:  
 THYSSENKRUPP MATERIALS NA  
 2821 LANGSTAFF ROAD  
 CONCORD, ONTARIO L4K 5C6  
 Tel: 905 669 9444 Fax: 9057389033

Ship Date 16Mar12 at 15:23 From PFW  
 Probill  
 Via VIM TRANSFER  
 FOB CONCORD  
 Frt PREPAID  
 Route 0-0 Manifest  
 Vhcle Trailer  
 Slp STAN IVERS (905-532-1350)  
 Sold To: (20115)  
 DART AEROSPACE

Ship To: (1)  
 DART AEROSPACE

# B I L L O F L A D I N G

\*\*\*\* TEL. 800-926-2600 \*\*\*\*  
 \*\*\*\*\*  
 \* WE STOCK STAINLESS STEEL \*  
 \* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT \*  
 \*\*\*\*\*  
 \*\*\*PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE  
 ADDED TO EVERY ORDER.\*\*\*

Page: 2 .... Last

*1 crate*

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE  
 RAPPORTÉES IMMÉDIATEMENT.  
 ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY  
 RETOUR DE MARCHANDISES AVEC NOTRE NUMÉRO D'APPROBATION SEULEMENT  
 MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

DOC : V/0080127751

DATE : 2004-09-21

PROD. REF. : 0000163537

NR : 48103/01

PAGE : 1 / 1



## INSPECTION CERTIFICATE

CUSTOMER : CORUS ALUMINIUM ROLLED PRODUCTS US

475 N. MARTINGALE ROAD, SUITE 400  
SCHAUMBURG 60173 USAYOUR ORDER NUMBER : PO2354 (Samuel's PO# A15696)  
OUR ORDER NUMBER : 48103/01  
DOCUMENT NUMBER : V/0080127751

Corus Aluminium N.V.

A. Stokkelien 67, 2670 Duffel - Belgium  
Tel. 32 (0)16 30 21 11 - Fax (0)16 30 27 84DESCRIPTION : T5-Q0A-250/11-AMS 4027-ASTM B209/B597-NOT INTENDED FOR USE IN AIRCRAFTS  
DIMENSIONS : 144" X 48" X 0.04"  
ARTICLE NO. : AL SHEET(STENC)-6061COIL  
NUMBERCAST  
NUMBER

## CHEMICAL COMPOSITION (%)

		SI	FE	CU	MN	MG	CR	TI	ZN
	MIN	0,40		0,15		0,8	0,04		
	MAX	0,8	0,7	0,40	0,15	1,2	0,35	0,15	0,25
001	7051601	0,68	0,4	0,22	0,08	1,0	0,16	0,02	0,01

OTHERS : EACH : MIN 0,05 MAX  
TOTAL : MIN 0,15 MAXTEST-  
NUMBER

## MECHANICAL PROPERTIES

1 N/MM2 = 1 MPA = 0,1 HBAR = 0,102 KG/MM2 = 0,145 KSI  
/A = REAR END /M = MIDDLE /V = FRONT END /O = RANDOM SAMPLING

		RM N/MM2	RP02 N/MM2	A %
	MIN MAX			
001	/M	336	276	16

HEAD OF LABORATORY,  
XAVIER SCHELLENSCharleston Aluminum LLC  
480 Frontage Rd.  
Gaston, SC 29053

Corus Aluminium Rolled Products - Corus Aluminium Extrusions

Del: 2401745746

From: Copper and Brass Sales

Cust: THYSSENKRUPP MATERIALS NA - ECAD

Part: PO: PEC = 237563

Wgt: 162.570 LB Date: 03/12/2012



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO16401

Purchase Order Date 3/09/12  
PO Print Date 3/09/12

Page Number 3 of 3

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD  
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"  
TORONTO, ON M5W 5V8  
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

905 669 9444

905 738 9033

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

Special Inst:

MATERIAL: 6061-T6/T651/T6510/T6511/T62  
ALUMINUM BAR AS PER QQ-A-225/8  
OR AMS-QQ-A-225/8 ORAMS  
4117/4128/4115/4116 OR QQ-A-200/8 OR  
AMS-QQ-A-200/8 OR AMS 4160 OR  
ASTM B211 OR ASTM B221

7

M6061T6S.040

6061-T6 .040 Sheet

3/16/12  
Yes

288.00  
sf

Yours ppd

\$1.6593

\$477.88

Special Inst:

MATERIAL: 6061-T6/T62 ALUMINUM  
SHEET  
AS PER QQ-A-250/11 OR AMS-QQ-A-  
250/11  
OR AMS 4025 OR AMS 40327 OR ASTM  
B209

8

M6061T6S.032

6061-T6 Sheet 0.032"

3/16/12  
Yes

192.00  
sf

Yours ppd

\$2.3229

\$446.00

Special Inst:

MATERIAL: 6061-T6/T62 ALUMINUM  
SHEET  
AS PER QQ-A-250/11 OR AMS-QQ-A-  
250/11  
OR AMS 4025 OR AMS 40327 OR ASTM  
B209

PO Total:

\$1,822.53

MATERIAL CERTIFICATION  
REQD UPON DELIVERY

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

Change Nbr: 2

Change Date: 3/09/12